THIS DOCUMENT APPLIES TO LC265*i*-IP AND LC80*i*-IP PRODUCTS

# Cutsheet for LC265*i*-IP/LC80*i*-IP

## World's First Active High Performance IP Addressable Loudspeakers

Polk Audio LC*i*-IP Ultra High Performance In-Wall/ In-Ceiling Loudspeakers are the world's first active Internet Protocol-ready Loudspeakers. They were created for IP networked systems (such as the ground-breaking NetStreams™ DigiLinx™ system). Integrated digital amplifiers eliminate remote amplifiers connected via hundreds of feet of performance-robbing speaker wires. The built-in Digital Signal Processor (DSP) and supplied Room Correction Software (the Performance Optimization Wizard™) enable every LC*i*-IP speaker to be optimized for maximum performance in any room. While the LC*i*-IP Series provides the greatest functionality when used within an IP-based system, these speakers are also compatible with any analog distributed audio system.

### LC265*i*-IP Hardware (included)

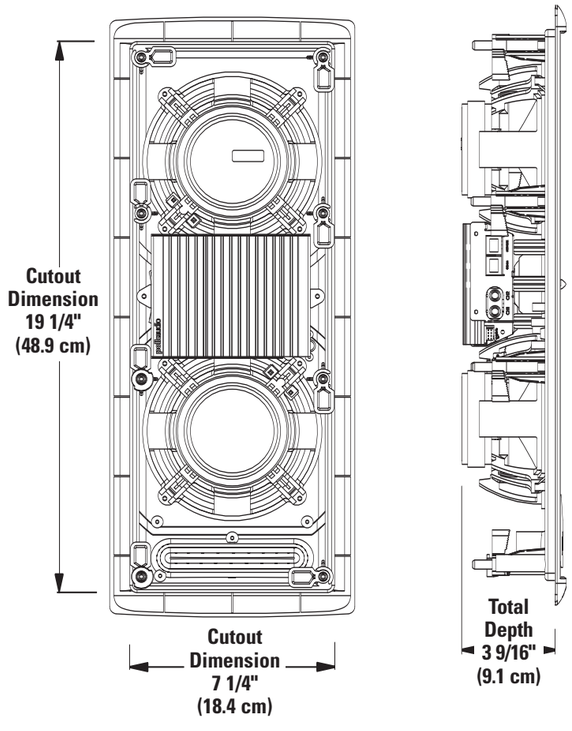
- One LC265*i*-IP speaker
- Performance Optimization Wizard – CD-ROM
- Euro-style (Phoenix) power supply connector
- Mounting template
- Paint mask
- Weather-resistant aluminum grille and stainless steel hardware
- LC*i*-IP manual
- Laminated configuration setup card
- Registration card

**Note:** If you are setting up LC*i*-IP speakers to be controlled via an IP-network such as NetStreams™ Digilinx™, purchase a network card, which is sold separately, from NewStreams™. The network card will control up to one pair of speakers.

**Important Note:** If anything is missing or damaged, or if your LC*i*-IP speaker fails to operate, notify Polk Audio Installer Support Services immediately at 800-377-7655. Hours: Mon-Fri, 9am - 5:30pm EST.

### Accessories (not included)

- Performance Enclosure for exact volume enclosure performance in pre-build installations. Improves bass performance and sound isolation. Model number: ENCL265.
- Speaker-level-to-line-level transformer, such as the PAC *SNI-35*. (For analog installations only. Powers up to 2 each LC265*i*-IP speakers.)
- SPS-1 Power Supply (a power supply is required).




**LC265*i*-IP Dimensions**

| | |
|---|---|
| Overall Height | 20 7/8" (55.5cm) |
| Overall Width | 8 1/2" (30.4cm) |

*Available Finish: Paintable White*

**LC265*i*-IP Performance Enclosure Dimensions**

55 5/8" H x 14" W x 3 3/8" D (141.3cm x 35.6cm x 8.6cm)

## LC80*i*-IP Hardware

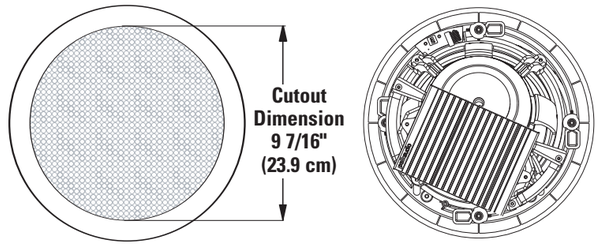
- One LC80*i*-IP speaker
- Performance Optimization Wizard – CD-ROM
- Euro-style (Phoenix) power supply connector
- Mounting template
- Paint mask
- Weather-resistant aluminum grille and stainless steel hardware
- LC*i*-IP manual
- Laminated configuration setup card
- Registration card

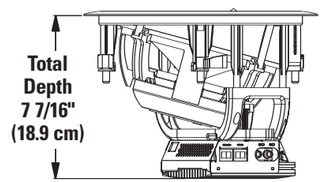
**Note:** If you are setting up LC*i*-IP speakers to be controlled via an IP-network such as NetStreams™ Digilinx™, purchase a network card, which is sold separately, from NewStreams™. The network card will control up to one pair of speakers.

**Important Note:** If anything is missing or damaged, or if your LC*i*-IP speaker fails to operate, notify Polk Audio Installer Support Services immediately at 800-377-7655.

## Accessories (not included)

- Performance Enclosure for exact volume enclosure performance in pre-build installations. Improves bass performance and sound isolation. Model number: ENCL 80IP.
- Speaker-level-to-line-level transformer, such as the PAC *SNI-35*. (For analog installations only. Powers up to 4 each LC80*i*-IP speakers.)
- SPS-1 Power Supply (a power supply is required).




**LC80*i*-IP Dimension**

Outer Diameter 10 3/4" (27.3cm)

*Available Finish: Paintable White*

**LC80*i*-IP Performance Enclosure Dimensions**

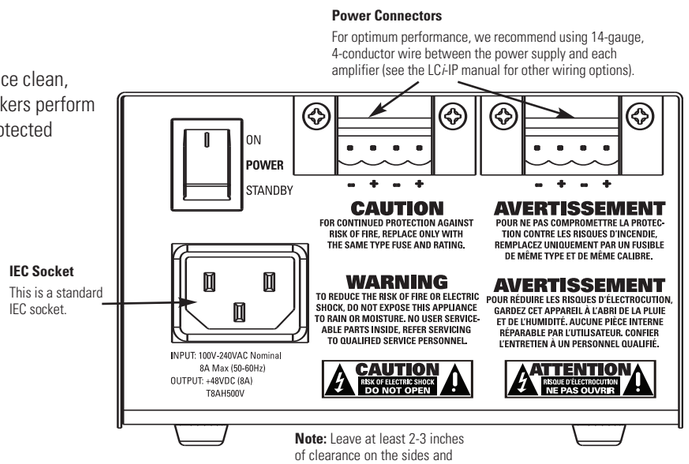
20 5/8" H x 13" W x 9" D (51.8cm x 33.0cm x 22.9cm)

## Power Supply

The SPS-1 power supply was specifically designed to produce clean, reliable power to ensure that all Polk Audio LC*i*-IP loudspeakers perform to their maximum capabilities. All output connectors are protected against short circuit and over current.

### Specifications

| | |
|---|---|
| **Output** | |
| Voltage | 48VDC |
| Current | 8A (Max continuous) |
| **Input** | |
| Voltage Range | 100-240 VAC Nominal Auto Switching |
| Frequency | 50-60Hz |
| Current Draw | 8A (120V)<br>3.5A (240V) |
| **Dimensions** | |
| Width | 4.9" (125mm) |
| Height | 3.1" (79mm) , 3 11/16"(93.6mm) with feet |
| Length | 14" (358mm) |
| Shipping Weight | 8.4lbs (4kgs) |
| Protection | Thermal, short circuit,current/power overdraw |
| **Fuse Replacement** | T8AH500V |


Power Connectors
For optimum performance, we recommend using 14-gauge, 4-conductor wire between the power supply and each amplifier (see the LCi-IP manual for other wiring options).
ON
POWER
STANDBY
CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH THE SAME TYPE FUSE AND RATING.
AVERTISSEMENT
POUR NE PAS COMPROMETTRE LA PROTECTION CONTRE LES RISQUES D'INCENDIE, REMPLACEZ UNIQUEMENT PAR UN FUSIBLE DE MÊME TYPE ET DE MÊME CALIBRE.
WARNING
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
AVERTISSEMENT
POUR RÉDUIRE LES RISQUES D'ÉLECTROCUTION, GARDEZ CET APPAREIL À L'ABRI DE LA PLUIE ET DE L'HUMIDITÉ. AUCUNE PIÈCE INTERNE RÉPARABLE PAR L'UTILISATEUR. CONFIER L'ENTRETIEN À UN PERSONNEL QUALIFIÉ.
IEC Socket
This is a standard IEC socket.
INPUT: 100V-240VAC Nominal
8A Max (50-60Hz)
OUTPUT: +48VDC (8A)
T8AH500V
CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
ATTENTION
RISQUE D'ELECTROCUTION
NE PAS OUVRIR
Note: Leave at least 2-3 inches of clearance on the sides and top of the power supply.

### Capabilites

SPS-1 will power 2 LC265*i*-IP speakers or 4 LC80*i*-IP speakers.



## LC265*i*-IP Specifications

### PERFORMANCE

| | |
|---|---|
| OVERALL FREQ. RESPONSE | 20Hz-27kHz |
| FREQ. RESPONSE -3DB LIMIT | 35Hz-27kHz |
| ANALOG AUDIO SIGNAL<br>VOLTAGE INPUT (LINE-LEVEL) FULL OUTPUT | 2V RMS |
| AMPLIFIER SNR | > 90DB |
| FIRMWARE UPGRADABLE | YES |
| MID-BASS DRIVER | 1–6.5"(16.5CM) MINERAL POLYPROPYLENE CONE, RUBBER SURROUND; |
| WOOFER | 1–6.5"(16.5CM) AERATED POLY-PROPYLENE CONE WITH 1.5" VOICE COIL |
| TWEETER | 1" (2.5CM) RING RADIATOR IN SWIVEL MOUNT |
| OUTSIDE DIMENSIONS | 8 1/2" X 20 7/8" (21.59CM X 53.04CM) |
| CUTOUT DIMENSIONS | 7 1/4" X 19 1/4" (18.42CM X 48.90CM) |
| MOUNTING DEPTH (WITH 1/2" DRYWALL) | 3 1/16" (7.78CM) |
| INSTALLED WEIGHT | 8.7 LBS (3.9kg) |
| SHIPPING WEIGHT | 11.6 LBS (5.3kg) |

### POWER CONTINUOUS RATINGS

200W speaker with < 0.5% THD+N (25W tweeter 4 Ohms, 75W mid 8 Ohms, 100W woofer 8 Ohms)

### POWER REQUIREMENTS PER SPEAKER

| | |
|---|---|
| VOLTAGE INPUT | 48VDC |
| CURRENT DRAW | 4.5A MAXIMUM |

## LC80*i*-IP Specifications

### PERFORMANCE

| | |
|---|---|
| OVERALL FREQ. RESPONSE | 25Hz-27kHz |
| FREQ. RESPONSE -3DB LIMIT | 40Hz-27kHz |
| ANALOG AUDIO SIGNAL<br>VOLTAGE INPUT (LINE-LEVEL) FULL OUTPUT | 2V RMS |
| AMPLIFIER SNR | > 90DB |
| FIRMWARE UPGRADABLE | YES |
| MID-BASS DRIVER | 1–8"(20.3CM) COMPOSITE POLYPROPYLENE CONE, RUBBER SURROUND |
| TWEETER | 1"(2.5CM) RING RADIATOR IN SWIVEL MOUNT |
| OUTSIDE DIMENSIONS | 10 3/4" DIA (27.3CM) |
| CUTOUT DIMENSIONS | 7 3/8" DIA (18.7CM) |
| MOUNTING DEPTH (WITH 1/2" DRYWALL) | 6 15/16" (17.6CM) |
| INSTALLED WEIGHT | 4.8 LBS (2.2kg) |
| SHIPPING WEIGHT | 6.8 LBS (3.1kg) |

### POWER CONTINUOUS RATINGS

100W speaker with < 0.5% THD+N (25W tweeter 4 Ohms, 75W mid 4 Ohms)

### POWER REQUIREMENTS PER SPEAKER

| | |
|---|---|
| VOLTAGE INPUT | 48V OR 28VDC |
| CURRENT DRAW | 2.3A @ 48V, OR<br>3.8A @ 28V MAXIMUM |

## LC265*i*-IP and LC80*i*-IP Specifications

### INHERENT DELAY

INHERENT DELAY FOR EACH SPEAKER IS:

A B CFG -2.5 MILLISECONDS  A B CFG -4.4 MILLISECONDS

ANY OTHER DELAY IS FROM THE MULTI-ROOM AUDIO VISUAL (MRAV).

### PROTECTION CIRCUITRY

Thermal, short-circuit, current overdraw, clipping compresser/limiter, reverse polarity

### CONTROLS AND ADJUSTMENTS
(Performance Optimization Wizard Program)

| | |
|---|---|
| COMPUTER REQUIREMENTS | |
| OPERATING SYSTEM | WINDOWS XP |
| USB PORT | 5-WIRE USB 1.1 CONNECTOR |
| HARD DRIVE | 5 MEGABYTES |

REQUIRED SPEAKER CONNECTIONS

TO CONNECT YOUR COMPUTER TO THE SPEAKER, YOU HAVE TWO OPTIONS:

1. USB PORT (ANALOG USE ONLY)
2. ETHERNET JACK WITH NETWORK DECODER CARD (SOLD SEPARATELY).

## LC265*i*-IP/LC80*i*-IP Specifications *(continued)*

### Connections

Wire Recommendations

*Network Line*
Shielded Cat5e or Cat6 cable with RJ-45 connectors. Wiring termination convention should be the same at both ends of the cable.

*COMM Line*
Shielded Cat5e or Cat6 cable with RJ-45 connectors. Wiring termination convention should be the same at both ends of the cable.

*Analog Line*
Low capacitance multi-stranded RCA shielded cable, or speaker wire with speaker-level-to-line-level transformer (such as the PAC *SNI-35).*

*USB Connection*
USB 1.1, 5-wire, USB to mini-USB cable.

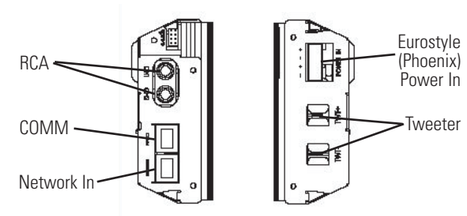
*Power Lines*
These recommendations are for all connections from the power supply to each speaker. 14/4 is recommended for all applications. If this is not possible, refer to this chart:

| Wire length | Wire gauge/ # of Conductors |
|---|---|
| <50' | 16/2 |
| 50-100' | 16/4 |
| >100' | 14/4 |

### Network Decoder Card

See Owner's Manual for installation instructions

### Amplifier Connections




LC*i*-IP speakers are designed for use with analog and digital systems. The speakers perform equally well in either mode, though the digital mode offers greater control functionality. Speaker-level-to-line-level adapters are available for legacy analog systems where speaker wire is already run, allowing connection to RCA input of the speaker.

### Recommended Configuration

LC*i*-IP Performance Optimization Wizard℠ Program

Polk Audio provides the Performance Optimization Wizard℠ on CD-ROM. This program enables you to optimize the performance characteristics of Polk Audio LC*i*-IP speakers specifically to their location in a given room and to the physical characteristics of that room. You can also download the Performance Optimization Wizard from our website **(www.polkaudio.com/downloads/po-wizard.exe )**.

**Walking Through the Room Optimization Choices**

- This program can be used for installing and setting up in-wall or in-ceiling LC*i*-IP speakers and asks basic configuration and room environment questions (figure1).

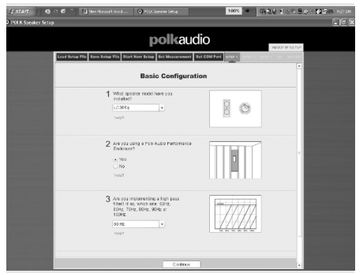



Figure 1

Depending on the speaker you're installing, its location and the room, you may be asked for a series of measurements, including the height of the listening room's ceiling, distances from walls, ceiling and floor to the speaker(s), as well as vertical and horizontal angles of speakers relative to the listening area. You may also be asked to provide measurements for the height, width, depth and center of the listening area (see the LC*i*-IP Owner's Manual for more).

### Factory Support

For product support visit our website at www.polkaudio.com or Polk Audio Customer Service: 1-800-377-7655 (Outside US & Canada: 410-358-3600) Monday-Friday, 9:00 AM-6:00 PM EST, polkcs@polkaudio.com

For more information on the LC*i*-265IP and LC*i*-80IP log onto **http://www.polkaudio.com/downloads/manuals/home/LCi-265IP LCi-80IP_Manual.pdf.**